

P-IEE-094/WO

CLAIMS

1. A data input device comprising several keys, said keys being arranged in at least two rows, characterized
in that a unidirectional position detector is associated with each row of keys, each unidirectional position detector comprising a first input
5 connection, a second input connection and an output connection,
in that the output connections of the unidirectional position detectors are connected at various locations to a first ohmic resistor, and
in that the first input connections are connected to a first terminal of the data input device and the second input connections are connected to a
10 second terminal of the data input device.
2. The device as claimed in claim 1, in which said first ohmic resistor comprises a strip of resistive material, said output connections of the unidirectional position detectors being connected at various locations to said strip of resistive material.
- 15 3. The device as claimed in claim 1, in which said first ohmic resistor comprises a series layout of a plurality of discrete resistors, said output connections of the unidirectional position detectors being connected to the series layout at various locations between discrete resistors.
- 20 4. The device as claimed in any one of claims 1 to 3, in which a unidirectional position detector comprises a plurality of discrete switches, said switches being connected on one side to the output connection of the position detector and on the other side at various locations to a second ohmic resistor, said second ohmic resistor being connected between the two input connections of the position detector.
- 25 5. The device as claimed in claim 4, characterized in that said second ohmic resistor comprises a strip of resistive material, said switches being connected at various locations to said strip of resistive material.

6. The device as claimed in claim 4, in which said second ohmic resistor comprises a series layout of a plurality of discrete resistors, said switches being connected to the series layout at various locations between discrete resistors.
- 5 7. The device as claimed in one of claims 1 to 3, in which a unidirectional position detector comprises a sensor in the form of a voltage divider, said voltage divider comprising a second ohmic resistor extending substantially along the row of keys of the keyboard, conducting lines extending from the second ohmic resistor and arranged at a certain
10 distance from one another, a comb-like conductor, whose teeth are arranged in an interdigital manner between said conducting lines, and an activation layer made of semiconducting material, in which the comb-like conductor is connected to the output connection of the position detector and the second ohmic resistor is connected between the two input
15 connections of the position detector.
8. The device as claimed in one of claims 1 to 3, in which a unidirectional position detector comprises several voltage divider-like sensors laid out in series.
9. The device as claimed in one of claims 7 or 8, in which the second ohmic
20 resistor of the voltage divider-like sensor is a nonlinear resistor.
10. The device as claimed in one of claims 1 to 9, comprising at least one third ohmic resistor wired between said first ohmic resistor and the respective terminal of the data input device or between said second ohmic resistor and the respective terminal of the data input device, said
25 third ohmic resistor being short-circuitable with the aid of a bypass circuit including a switch.
11. The device as claimed in one of claims 1 to 10, comprising at least one series layout of a fourth ohmic resistor and of a switch, said series layout being wired up in parallel to said first ohmic resistor or to said second
30 ohmic resistor.

12. The device as claimed in one of claims 4 to 6, in which at least two discrete switches are disposed at a distance such that alternate or simultaneous actuation of the two discrete switches is possible using a single control element.
- 5 13. The device as claimed in claim 8, in which at least two voltage divider-like sensors are disposed at a distance such that alternate or simultaneous actuation of the two voltage divider-like sensors is possible using a single control element.
- 10 14. The device as claimed in claim 7 or 8, in which virtual keys are defined for a voltage divider-like sensor by associating a certain range of resistances with each of the keys, and in which at least two keys are defined in such a way as to be physically disposed at a distance such that alternate or simultaneous actuation of the two keys is possible using a single control element.
- 15 15. The device as claimed in one of the preceding claims, in which at least two unidirectional position detectors are disposed at a distance such that alternate or simultaneous actuation of the two position detectors is possible using a single control element.
- 20 16. The device as claimed in one of claims 4 to 6, in which said discrete switches of several unidirectional position detectors are connected to one and the same second ohmic resistor.